# STATE OF NEW HAMPSHIRE Department of Environmental Services Air Resources Division



# **Title V Operating Permit**

Permit No: **TV-OP-047**Date Issued: **March 3, 2003** 

This certifies that:
City of Nashua
Department of Public Works
229 Main Street
Nashua, NH 03061

has been granted a Title V Operating Permit for the following facility and location:

Four Hills Landfill Gas to Energy Facility

840 West Hellis Street

840 West Hollis Street Nashua, NH 03062

AFS Point Source Number - 3301100191

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V Operating Permit Application filed with the New Hampshire Department of Environmental Services on **April 4, 1997 as amended April 23, 2001** under the signature of the following responsible official certifying to the best of their knowledge that the statements and information therein are true, accurate and complete.

Responsible Official:

(612) 373-5464

George Crombie
Director of Public Works
(603) 589-3140
Technical Contact:

Ben Heuiser Manager, Engineering Services Four Hills LLC and Suncook Energy LLC Richard K. Reine Superintendent, Nashua Solid Waste Department (603) 589-3410

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of Code of the Federal Regulations 40 Part 70.

This Title V Operating Permit shall expire on March 31, 2008

# SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

For the New Hampshire Department of Environmental Services, Air Resource Division

Administrator, Stationary Source Management Bureau

# TABLE OF CONTENTS

ABBREVIATIONS	3
FACILITY SPECIFIC TITLE V OPERATING PERMIT CONDITIONS	5
I. FACILITY DESCRIPTION OF OPERATIONS	5
II. PERMITTED ACTIVITIES	
III. SIGNIFICANT ACTIVITIES IDENTIFICATION AND STACK CRITERIA	
A. Significant Activity Identification	
B. Stack Criteria	
IV. INSIGNIFICANT ACTIVITIES IDENTIFICATION	7
V. EXEMPT ACTIVITIES IDENTIFICATION	7
VI. POLLUTION CONTROL EQUIPMENT IDENTIFICATION	7
VII. ALTERNATIVE OPERATING SCENARIOS	7
VIII. APPLICABLE REQUIREMENTS	7
A. State-only Enforceable Operational and Emission Limitations	<i>7</i>
B. Federally Enforceable Operational and Emission Limitations	
C. Emission Reductions Trading Requirements	
D. Monitoring/Testing Requirements	
E. Recordkeeping Requirements	
F. Reporting Requirements	
IX. REQUIREMENTS CURRENTLY NOT APPLICABLE	
GENERAL TITLE V OPERATING PERMIT CONDITIONS	22
X. ISSUANCE OF A TITLE V OPERATING PERMIT	22
XI. TITLE V OPERATING PERMIT RENEWAL PROCEDURES	
XII. APPLICATION SHIELD	
XIII. PERMIT SHIELD	22
XIV. REOPENING FOR CAUSE	
XV. ADMINISTRATIVE PERMIT AMENDMENTS	
XVI. OPERATIONAL FLEXIBILITY	23
XVII. MINOR PERMIT AMENDMENTS	
XVIII. SIGNIFICANT PERMIT AMENDMENTS	26
XIX. TITLE V OPERATING PERMIT SUSPENSION, REVOCATION OR NULLIFICATION	26
XX. INSPECTION AND ENTRY	
XXI. CERTIFICATIONS	27
A. Compliance Certification Report	
B. Certification of Accuracy Statement	
XXII. ENFORCEMENT	
XXIII. EMISSION-BASED FEE REQUIREMENTS	
XXIV. DUTY TO PROVIDE INFORMATION	
XXV. PROPERTY RIGHTS	
XXVI. SEVERABILITY CLAUSE	
XXVII. EMERGENCY CONDITIONS	
XXVIII. PERMIT DEVIATION	

#### **ABBREVIATIONS**

AAL Ambient Air Limit

AP-42 Compilation of Air Pollutant Emission Factors

ARD Air Resources Division

ASTM American Society for Testing and Materials

BACT Best Available Control Technology

BHP (or bhp) Brake Horse Power
BTU British Thermal Units

CAA Clean Air Act, 42 U.S.C. § 7401, et seq. CAM Compliance Assurance Monitoring

CAS Chemical Abstracts Service

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations CNG Compressed Natural Gas

CO Carbon Monoxide CO<sub>2</sub> Carbon Dioxide

COMS Continuous Opacity Monitoring System

DER Discrete Emission Reduction

Env-A New Hampshire Code of Administrative Rules – Air Resources Division
Env-Wm New Hampshire Code of Administrative Rules – Waste Management Division

ECS Emission Control System ERC Emission Reduction Credit

FR Federal Register

HAP Hazardous Air Pollutant

HHV High Heat Value HCl Hydrochloric acid

Hr Hour

kGal 1,000 gallons KW Kilowatt

LAER Lowest Achievable Emission Rate

Lb/hr Pounds per hour
LNB Low NO<sub>x</sub> Burner
LNG Liquid Natural Gas

LPG Liquid Petroleum Gas (Propane)

MACT Maximum Achievable Control Technology

mg/L Milligrams per liter

MMBTU (or MMBtu) Million British Thermal Units

MMCF Million Cubic Feet

MW Megawatt

NAAQS National Ambient Air Quality Standard

NESHAPs National Emissions Standards for Hazardous Air Pollutants

NG Natural Gas

NHDES (or DES) New Hampshire Department of Environmental Services

NMOC Nonmethane Organic Compound

NO<sub>x</sub> Oxides of Nitrogen

NSPS New Source Performance Standard

NSR New Source Review PCB Polychlorinated biphenyls

# **ABBREVIATIONS** (cont.)

PE Potential Emission
PM Particulate Matter

PM<sub>10</sub> Particulate Matter less than 10 microns diameter

ppm part per million

ppmv part per million by volume

PSD Prevention of Significant Deterioration

PSI Pounds per Square Inch

PTE Potential to Emit

RACT Reasonably Available Control Technology

RTAP Regulated Toxic Air Pollutant SIP State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide

T-12M Tons during any consecutive 12-month period

TAP Toxic Air Pollutant

TSP Total Suspended Particulate Matter

TPY Tons per Year

USEPA United States Environmental Protection Agency

VOC Volatile Organic Compound

# **Facility Specific Title V Operating Permit Conditions**

# I. Facility Description of Operations

Four Hills Landfill Gas to Energy Facility is a solid waste management facility located in Nashua, New Hampshire. The City of Nashua, Department of Public Works, owns and operates the landfill (EU04 and EU05 as identified below) and other insignificant activities. Four Hills LLC is responsible for maintaining the landfill gas collection system and the flare (EU03 as identified below). Suncook Energy, LLC is responsible for Engines Nos. 1 and 2 (EU01 and EU02 as identified below). The City of Nashua, Department of Public Works, Four Hills LLC, and Suncook Energy LLC (collectively referred to as the Permittee) have signed a Memorandum of Understanding delineating the responsibility of each party. The predominant sources of air pollutant emissions at Four Hills Landfill are the landfills; the landfill gas recovery systems, consisting of one flare and two engines; and fugitive dust sources, including vehicular traffic, landfill operations, construction activities, the loading and unloading of daily cover material (consisting of either ground construction/demolition waste or on-site soil) and bulldozing of the daily cover. Other insignificant activities, such as an emergency generator, an animal crematorium, propane heaters, and fuel storage tanks, emit small amounts of air pollutants. These insignificant activities are referred to in the permit as facility-wide emission units.

# II. Permitted Activities

In accordance with all of the applicable requirements identified in this permit, the Permittee is authorized to operate the devices and or processes identified in Sections III, IV, V and VI within the terms and conditions specified in this Permit.

# III. Significant Activities Identification and Stack Criteria

# A. Significant Activity Identification

The activities identified in the following table (Table 1) are subject to and regulated by this Title V Operating Permit:

	Table 1 – Significant Activity Identification						
Emissio n Unit Number	Description of Emission Unit	Maximum Gross Heat Input or Maximum Power Output	<b>Maximum Operating Conditions</b>				
EU01	Internal Combustion Engine #1 – Caterpillar Model No. G3516, Serial Number 4EK000649	9.2 MMBtu/hr (HHV-input) or 1144 HP (output)	A) Maximum fuel consumption shall be limited to 80,592 MMBtu of gross heat input of landfill gas during any consecutive 12-month period assuming 500 Btu/cubic feet, HHV (which is equivalent to 161,184,000 actual cubic feet of landfill gas). The Permittee may increase the landfill gas flow provided the total heat input limit is not exceeded.				
			B) Maximum gross electrical				

	Table 1 – Significant Activity Identification						
Emissio n Unit Number	Description of Emission Unit	Maximum Gross Heat Input or Maximum Power Output	Maximum Operating Conditions				
			generation load shall be limited to 820 kilowatts (KW).				
EU02	Internal Combustion Engine #2 – Caterpillar Model No. G3612, Serial Number 1YG00078	24.7 MMBtu/hr (HHV-input) or 3175 HP (output)	A) Maximum fuel consumption shall be limited to 216,372 MMBtu of gross heat input of landfill gas during any consecutive 12-month period assuming 500 Btu/cubic feet, HHV (which is equivalent to 432,744,000 actual cubic feet of landfill gas). The Permittee may increase the landfill gas flow provided the total heat input limit is not exceeded.  B) Maximum gross electrical generation load shall be limited to 2285 KW.				
EU03	Landfill Gas Flare – LFGas Candle Flare	60.0 MMBtu/hr (HHV-input)	Maximum fuel consumption shall be limited to 288,029 MMBtu of gross heat input of landfill gas during any consecutive 12-month period assuming 500 Btu/cubic feet, HHV (which is equivalent to 576,058,000 actual cubic feet of landfill gas). The Permittee may increase the landfill gas flow provided the total heat input limit is not exceeded.				
EU04	Unlined Landfill	NA	Active landfill				
EU05	C/D Landfill	NA	Closed landfill				

# **B.** Stack Criteria

The following stacks for the above listed significant devices at this facility shall discharge vertically without obstruction (including rain caps) and meet the following criteria in accordance with the state-only modeling requirements specified in Env-A 1400:

	Table 2 – Stack Criteria						
Stack Number	Emission Unit Number	Emission Unit Description	Minimum Stack Height (Feet) Above Ground	Maximum Stack Diameter	Minimum Exhaust Air Flow (acfm)		
			Level	(Feet)			
ST01	EU01	Internal Combustion Engine #1	36	0.83	5,466		
ST02	EU02	Internal Combustion Engine #2	44	1.67	20,520		
ST03	EU03	Landfill Gas Flare	23	0.67	28,904		

Preauthorized changes to the state-only requirements pertaining to stack parameters (set forth in this permit), shall be permitted only when an air quality impact analysis which meets the criteria

of Env-A 606 is performed either by the facility or the New Hampshire Department of Environmental Services, Air Resources Division (if requested by facility in writing) in accordance with the ADES Policy and Procedure for Air Quality Impact Modeling. All air modeling data shall be kept on file at the facility for review by the DES upon request.

# IV. <u>Insignificant Activities Identification</u>

All activities at this facility that meet the criteria identified in the New Hampshire Rules Governing the Control of Air Pollution Env-A 609.03(g), shall be considered insignificant activities. Emissions from the insignificant activities shall be included in the total facility emissions for the emission-based fee calculation described in Section XXIII. of this Permit.

# V. <u>Exempt Activities Identification</u>

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be subject to or regulated by this Title V Operating Permit.

# VI. <u>Pollution Control Equipment Identification</u>

The Emission Unit Nos. EU01, EU02, and EU03 are considered pollution control equipment or techniques for EU04 and EU05 (the landfills).

# VII. <u>Alternative Operating Scenarios</u>

No alternative operating scenarios were identified for this Permit.

## VIII. Applicable Requirements

## A. State-only Enforceable Operational and Emission Limitations

The Permittee shall be subject to the state-only operational and emission limitations identified in Table 3 below.

	Table 3 – State-Only Enforceable Operational and Emission Limitations				
Item	Regulatory Cite	Applicable	Applicable Requirement		
#		Emission			
		Unit			
1.	Env-A 1403	EU01, EU02,	All devices or processes shall comply with Env-A 1400 (Regulated		
		EU03, EU04,	Toxic Air Pollutants).		
		EU05 and			
		Facility wide			
2.	Env-A 1404.01(d)	EU01, EU02,	Documentation for the demonstration of compliance shall be retained at		
		EU03, EU04,	the facility and shall be made available to DES for inspection upon		
		EU05 and	request.		
		Facility wide			

	Table 3 – State-Only Enforceable Operational and Emission Limitations			
Item	Regulatory Cite	Applicable	Applicable Requirement	
#		Emission		
		Unit		
3.	Env-A 1405.01	EU01, EU02,	A) The owner of a new or modified device or process requiring a permit	
		EU03, EU04,	under this chapter shall submit an application for a temporary permit	
		EU05 and	in accordance with Env-A 607.03.	
		Facility wide	B) Pursuant to RSA 125-I:5,I, the owner shall not operate the device or	
			process until a temporary permit is issued.	
4.	Env-A 1406.01	EU01, EU02,	The owner of any device or process that emits an RTAP shall determine	
		EU03, EU04,	compliance with the AAL by using one of the methods provided in Env-	
		EU05 and	A 1406.02, Env-A 1406.03, or Env-A 1406.04. Upon request, the owner	
		Facility wide	of any device or process that emits an RTAP shall provide	
			documentation of compliance with the AAL to DES.	

# **B.** Federally Enforceable Operational and Emission Limitations

1. The Permittee shall be subject to the emission limitations summarized in Table 4 below for the listed fuel burning devices.

	Table 4 – Emission Limitations						
	NOx*	NMOC	Opacity				
EU01	3.0 lbs/hr;	0.49 lbs/hr;	5.8 lbs/hr;	1.1 lbs/mmBtu;	1.51 lbs/hr;	20%	
	13.3 tons/any	2.2 tons/any	25.4 tons/any	4.84 tons/any	6.6 tons/any		
	consecutive 12-	consecutive 12-	consecutive 12-	consecutive 12-	consecutive 12-		
	month period	month period	month period	month period	month period		
EU02	4.9 lbs/hr;	1.4 lbs/hr;	15.4 lbs/hr;	3.0 lbs/mmBtu;	5.6 lbs/hr;	20%	
	21.5 tons/any	6.1 tons/any	67.5 tons/any	13.0 tons/any	24.5 tons/any		
	consecutive 12-	consecutive 12-	consecutive 12-	consecutive 12-	consecutive 12-		
	month period	month period	month period	month period	month period		
EU03	7.1lbs/hr;	3.2 lbs/hr;	45.0 lbs/hr;	1.0 lbs/mmBtu;	6.2 lbs/hr;	20%	
	17.0 tons/any	7.7 tons/any	108.0 tons/any	2.5 tons/any	14.9 tons/any		
	consecutive 12-	consecutive 12-	consecutive 12-	consecutive 12-	consecutive 12-		
	month period	month period	month period	month period	month period		

Refer to Table 5 for a facility-wide NOx emission limit imposed for the purpose of avoiding NOx RACT.

2. The Permittee shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

	Table 5 – Federally Enforceable Operational and Emission Limitations			
Item	tem Regulatory Cite Applicable Applicable Requirement			
#		Emission		
		Unit		
1.	Temporary Permit No. TP-B-355	EU01	Maximum fuel consumption shall be limited to 80,592 MMBtu of gross heat input of landfill gas during any consecutive 12-month period assuming 500 Btu/cubic feet, HHV (which is equivalent to 161,184,000 actual cubic feet of landfill gas). The Permittee may increase the landfill gas flow provided the total heat input limit is not exceeded.	
2.	Temporary Permit No. TP-B-356	EU02	Maximum fuel consumption shall be limited to 216,372 MMBtu of gross heat input of landfill gas during any consecutive 12-month period	

	Table 5 –	Federally Enfo	orceable Operational and Emission Limitations
Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
			assuming 500 Btu/cubic feet, HHV (which is equivalent to 432,744,000 actual cubic feet of landfill gas). The Permittee may increase the landfill gas flow provided the total heat input limit is not exceeded.
3.	Temporary Permit No. TP-B-357	EU03	Maximum fuel consumption shall be limited to 288,029 MMBtu of gross heat input of landfill gas during any consecutive 12-month period assuming 500 Btu/cubic feet, HHV (which is equivalent to 576,058,000 actual cubic feet of landfill gas). The Permittee may increase the landfill gas flow provided the total heat input limit is not exceeded.
4.	Temporary Permit No. TP-B-355	EU01	Maximum gross electrical generation load shall be limited to 820 KW.
5.	Temporary Permit No. TP-B-356	EU02	Maximum gross electrical generation load shall be limited to 2285 KW.
6.	Env-A 2003.02 Visible Emission Standard for Fuel Burning Devices	EU01, EU02, EU03, and Facility wide	The average opacity from fuel burning devices shall not exceed 20 percent for any continuous 6-minute period in any 60-minute period.
7.	Env-A 2003.08 Particulate Emission Standards for Fuel Burning Devices	EU01, EU02, EU03, and Facility wide	The Permittee shall not cause or allow particulate matter emissions from fuel burning devices with maximum gross heat input rate less than 100 mmBtu/hr in excess of 0.30 lb/mmBtu.
8.	Env-A 1211 Emission Limitation to avoid NOx RACT	EU01, EU02, EU03, and Facility-wide	The combined theoretical potential NOx emissions shall not exceed 50 tons per any consecutive 12-month period, in order for the facility to avoid NOx RACT requirements.
9	Env-A 1002 Fugitive Dust	EU04 and EU05	The Permittee shall take and continue precautions throughout the duration of activities, which involve transportation, storage, use, and removal of soil, in order to prevent, abate, and control fugitive dust emissions. Such precautions shall include wetting or covering.
10.	40 CFR 60.752 (b), 40 CFR 60.754, and 40 CFR 60.757(b)(1)(ii) Standards for Air Emissions from MSW Landfills	EU04, EU05	The Permittee shall calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754. The Permittee has chosen to calculate the NMOC concentration according to 40 CFR 60.754(a)(3), Tier 3. Accordingly, the Permittee shall submit a periodic estimate of the emissions report to the US EPA and the DES, except as provided for in 40 CFR 60.757(b)(1)(ii), which allows the Permittee to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report if the estimated NMOC emission rate as reported in the annual report is less than 50 megagrams per year in each of the next 5 consecutive years. The Permittee shall recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) until the calculated NMOC emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. If the NMOC emission rate is greater than 50 megragrams per year, the Permittee shall meet the requirements to install a collection and control system. If the landfill is permanently closed, a closure notification shall be submitted to US EPA and DES as provided for in 40 CFR 60.757(d).
11.	40 CFR 60.11 Compliance with Standards and Maintenance Requirements	EU01, EU02, EU03, EU04, EU05	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

	Table 5 – Federally Enforceable Operational and Emission Limitations			
Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement	
12.	40 CFR 60.12 Circumvention	EU01, EU02, EU03, EU04, EU05	No owner or operator subject to the provisions of 40 CFR Subpart A shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.	
13.	Standards for inactive waste disposal sites for asbestos mills & manufacturing & fabricating operations	EU04, EU05	For any inactive waste disposal site that received deposits of asbestos-containing waste material, the Permittee shall  A) Comply with one of the following:  1) Discharge no visible emissions to the outside air from an inactive waste disposal site; or  2) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material; or  3) Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste.  B) Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing or comply with A2 or A3 above. The warning signs shall be displayed at all entrances at intervals of 100 m (328 ft) or less along the property line or along the perimeter of the sections where asbestos-containing waste material was deposited and shall meet the specifications of 40 CFR 61.151 (b). The perimeter shall be fenced in a manner adequate to deter access by the general public.  C) Notify EPA and DES in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material. The notification shall include the following:  (1) Scheduled startup and completion dates, (2) The reason for disturbing the waste, (3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material,  (4) Location of any temporary storage site and the final disposal site.  D) Within 60 days of a site becoming inactive, record a notation on the deed to the facility property, in accordance with state law, and on any other instrument that would normally be examined during a title search that the land has been used for the disposal of asbestos-containing materials; the survey pl	
14.	40 CFR 61.154 (a),	EU04, EU05	EPA; and the site is subject to 40 CFR Part 61 Subpart M.  For an active waste disposal site that receives asbestos-containing	
	(c), and (d)	,	material, the Permittee shall meet the following requirements:	

	Table 5 – Federally Enforceable Operational and Emission Limitations			
Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement	
	Standards for Active Waste Disposal Sites Receiving Asbestos-Containing Material (Federally Enforceable Only- Not State Enforceable)		<ul> <li>A) No visible emissions to the outside air; or</li> <li>B) At the end of each operating day or at least once every 24-hour period while the site is in continuous operation, the asbestoscontaining waste deposited during the operating day or within the previous 24-hour period shall be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material or be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion; or</li> <li>C) Use an alternative control method that has received written approval from EPA.</li> </ul>	
15.	40 CFR 61.154 (b) Barriers for Active Waste Disposal Sites Receiving Asbestos-Containing Material	EU04, EU05	For an active waste disposal site that receives asbestos-containing material, the Permittee shall meet the following requirements:  A) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed at all entrances and at intervals of 100 m (300 ft.) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited or at the end of each operating day or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste deposited during the operating day or within the previous 24-hour period shall be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material.  B) The warning signs must be posted in such a manner and location that a person can easily read the legend, and conform to the requirements established in 40 CFR 61.154 (b).  C) The perimeter shall be fenced in a manner adequate to deter access by the general public.	
16.	RSA 125-C:6, RSA 125-C:11, and Env- A 606.04 National Ambient Air Quality Standards	EU01, EU02, EU03, EU04, EU05, and Facility wide	The Permittee shall comply with the National Ambient Air Quality Standards (NAAQS) and the applicable requirements of RSA 125-C:6, RSA 125-C:11, and Env-A 606.04. These sections include, but are not limited to, descriptions of the powers and duties of the commissioner, and requirements for adherence to permit application procedures and air pollution dispersion modeling impact analyses.	
17.	40 CFR 68 and 1990 CAA Section 112(r)(1) Accidental Release Program Requirements	Facility wide	The Permittee maintains no quantities of regulated substances above the threshold quantities established by the EPA under 40 CFR 68.130.  Administrative controls will be established by the Permittee in order to ensure that inventories of regulated substances are maintained below the specified threshold quantities. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1).  General Duty includes the following responsibilities:  (A) Identify potential hazards that may result from such releases using appropriate hazard assessment techniques;  (B) Design and maintain a safe facility;  (C) Take steps necessary to prevent releases; and  (D) Minimize the consequences of accidental releases that do occur.  If, in the future, the Permittee wishes to store quantities of regulated substances above the threshold levels, a risk management plan shall be submitted to the Part 68 implementing agency prior to exceeding threshold quantity levels in a timely manner.	

# C. Emission Reductions Trading Requirements

The Permittee shall be allowed to generate Discrete Emission Reductions (DERs) in accordance with Env-A 3100 and the Notice and Certification of NOx DERs dated March 21, 2000.

# **D.** Monitoring/Testing Requirements

1. The Permittee is subject to the monitoring/testing requirements as contained in Table 6 below:

	Table 6 – Monitoring/Testing Requirements							
Item #	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite			
1.	EU04, EU05	NMOC concentration	EPA Method 25 or 25C; EPA Method 18 may be used to analyze samples collected by EPA Method 25 or 25C sampling procedures	Initially and every 5 years; the next test shall occur by March 17, 2004	40 CFR 60.754(a)(3)			
2.	EU04, EU05	NMOC mass emission rate (in megagrams/year)	A) If the actual year-to-year waste acceptance rate is known:  M <sub>NMOC</sub> =∑2kL <sub>0</sub> M <sub>i</sub> (e <sup>-kt</sup> i)(C <sub>NMOC</sub> )(3.6x10 <sup>-9</sup> )  where: M <sub>NMOC</sub> =Total NMOC emission rate from the landfill (megagrams per year) k=methane generation rate constant, year <sup>-1</sup> L <sub>0</sub> =methane generation potential, cubic meters per megagram solid waste M <sub>i</sub> =mass of solid waste in the ith section, megagrams t <sub>i</sub> =age of the ith section years C <sub>NMOC</sub> =concentration of NMOC, ppmv as hexane 3.6x10 <sup>-9</sup> =conversion factor The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M <sub>i</sub> if documentation of the nature and amount of such wastes in maintained.  B) If the actual year-to-year waste acceptance rate is unknown:  M <sub>NMOC</sub> =2L <sub>0</sub> R(e <sup>-kc</sup> -e <sup>-kt</sup> )(C <sub>NMOC</sub> )(3.6x10 <sup>-9</sup> )  where: M <sub>NMOC</sub> =Total NMOC emission rate from the landfill (megagrams per year) k=methane generation rate constant, year <sup>-1</sup> L <sub>0</sub> =methane generation rate constant, year <sup>-1</sup> L <sub>0</sub> =methane generation potential, cubic meters per megagram solid waste R=average annual acceptance rate, megagrams per year M <sub>i</sub> =mass of solid waste in the ith section, megagrams t=age of landfill, years C <sub>NMOC</sub> =concentration of NMOC, ppmv as hexane c=time since closure, years; for active landfill	Annually	40 CFR 60.754(a)(1)			

	Table 6 – Monitoring/Testing Requirements					
Item #	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite	
			c=0 and e <sup>-kc</sup> =1 3.6x10 <sup>-9</sup> =conversion factor The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for R if documentation of the nature and amount of such wastes in maintained.			
3.	Inlet to EU01, EU02, EU03	Total landfill gas flow	Flow meter	Continuously	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
4.	EU01, EU02	Electrical generation (kilowatt hours [kwhr])	Electric Meter	Daily	Temporary Permit No. TP-B-355 and TP-B- 356	
5.	EU01	Landfill gas consumption	Flow meters	Continuously	Temporary Permit No. TP-B-355	
6.	EU02	Landfill gas consumption	Flow meters	Continuously	Temporary Permit No. TP-B-356	
7.	EU03	Landfill gas consumption	Flow meters	Continuously	Temporary Permit No. TP-B-357	
8.	EU01, EU02,	Opacity	EPA Method 9	As needed	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
9.	EU03	Opacity	Method 22	As needed	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
10.	EU01, EU02, EU03,	Particulate Emissions	EPA Reference Method 5	Upon written request by DES and/or EPA	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
11.	EU01, EU02, EU03, and Facility wide	NOx emissions in tons/month	EPA-approved emission factors, stack test data or accepted manufacturer's guarantee data	Monthly	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
12.	EU01, EU02, EU03,	SO <sub>2</sub> emissions in tons/month	EPA-approved emission factors or stack test data	Monthly	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
13.	EU01, EU02, EU03,	CO emissions in tons/month	EPA-approved emission factors or stack test data	Monthly	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
14.	EU01, EU02, EU03,	PM emissions in tons/month	EPA-approved emission factors or stack test data	Monthly	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	
15.	EU01, EU02, EU03	NMOC emissions in tons/month	EPA-approved emission factors or stack test data	Monthly	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)	

	Table 6 – Monitoring/Testing Requirements						
Item	Device	Parameter	Method of Compliance	Frequency of	Regulatory Cite		
#				Method			
16.	EU01, EU02, EU03	Dispersion of HAPs and other regulated pollutants	Conduct annual visual inspections of each stack, each fuel-burning device, and each process unit.  Annual inspections shall include a thorough inspection of the condition of each stack exterior, each fuel burning device and each process unit and shall be focused on identifying any holes, leaks, deposits, deficiencies, or	Annually	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B)		
			deterioration of equipment and stacks.				

- 2. <u>Sampling Procedures</u> The Permittee shall determine the NMOC concentration using the following sampling procedures [40 CFR 60.754(a)(3)]:
  - A) The Permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste.
  - B) The EPA Methods listed above in Table 6 shall be used.
  - C) Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. The Permitte shall terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes.
  - D) If using Method 18, the Permittee must identify all compounds in the sample and at a minimum, test for those compounds published in the most recent *Compilation of Air Pollutant Emission Factors (AP-42)*, minus carbon monoxide, hydrogen sulfide, and mercury. At a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to NMOC concentration as hexane at 3% oxygen by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples is taken, all samples must be used in the analysis.
  - E) The Permittee must divide the NMOC concentration from Method 25 or 25C by six to convert from NMOC concentration as carbon, to NMOC concentration as hexane at 3% oxygen.
  - F) If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment, and a minimum of three samples must be collected from the header pipe.

# E. Recordkeeping Requirements

The Permittee is subject to the Recordkeeping requirements as contained in Table 7 below:

	Table 7 – Applicable Rec	ordkeeping Require	ements <sup>1</sup>	
Item#	Recordkeeping Requirement	Frequency of	Applicable	Regulatory Cite
		Recordkeeping	<b>Emission Unit</b>	
1.	NSPS Recordkeeping Requirements – The Permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report, the current amount of solid waste in-place, and the year-by year waste acceptance rate. Records may be maintained off-site if they are retrievable within 4 hours. Either	Continuously	EU04, EU05	40 CFR 60.758 (a)
	paper copy or electronic formats are acceptable.			
2.	General NOx Recordkeeping Requirements: The Permittee shall record and maintain the following information for fuel burning devices: A) Facility information, including the following: 1) Source name; 2) Source identification; 3) Physical address; and 4) Mailing address. B) Identification of fuel burning devices; C) Operating schedule for each fuel burning device identified in Condition B) above: 1) Days per calendar week during the normal operating schedule; 2) Hours per day during the normal operating schedule and for a typical ozone season day; and 3) Hours per year during the normal operating schedule. D) Type and amount of fuel burned for each fuel-burning device during normal operating conditions and for a typical ozone season day, if different from normal operating conditions, on an hourly basis in mmBtu/hr. E) Theoretical potential NOx emissions for the calculation year for each fuel burning device:	Annually and as applicable	EU01, EU02, EU03	Env-A 901.08 (c) (1)–(5) (old) and Env-A 905.02 (new)
	<ol> <li>Annual emissions, in tons per year; and</li> <li>Typical ozone season day emissions, in pounds per day.</li> <li>Actual NOx emissions for each fuel burning device:</li> </ol>			

<sup>&</sup>lt;sup>1</sup> On April 23, 1999 DES promulgated new Env-A 900 regulations in an attempt to streamline the recordkeeping and reporting requirement sections of the New Hampshire Code of Administrative Rules. Until such time that the new Env-A 900 regulations are approved and adopted into the State Implementation Plan (SIP) by EPA, all Title V permits will be incorporating the old Env-A 900 regulations (which became effective on November 11, 1992), unless the new Env-A 900 regulations are more stringent. The recordkeeping and reporting requirements contained in this permit are those requirements, which the facility shall be required to comply with. These recordkeeping and reporting requirements shall fall under the Permit Shield provisions as contained in Section XIII of this permit.

	Table 7 – Applicable Recordkeeping Requirements <sup>1</sup>					
Item #	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite		
	<ol> <li>Annual emissions, in tons per year; and</li> <li>Typical ozone season day emissions, in pounds per day.</li> <li>Emission factors and the origin of the emission factors used to calculate the NOx emissions.</li> </ol>					
3.	Fuel Utilization Recordkeeping Requirements for Combustion Devices Burning Municipal Solid Waste Landfill Gas: The Permittee shall maintain monthly records (unless an alternative schedule has been approved by DES according to Env-A 912) of the following fuel characteristics and utilization:  A) Consumption; B) Sulfur content as percent sulfur by weight of fuel or in grains per 100 cubic feet of fuel; C) BTU content per cubic foot of fuel; and D) Operating hours of each device so that the distribution of fuel among each combustion device can be estimated.	Monthly or Alternative Schedule Approved by DES	EU01, EU02, EU03	Env-A 903.03 (a) (5) and (b) (new) State Enforceable Only		
4.	Record Retention: The Permittee shall retain the records required by this permit on file for a minimum of 5 years.	Retain for a minimum of 5 years	EU01, EU02, EU03, EU04, EU05, and Facility wide	Env-A 902.01 (a) (new) and 40 CFR 70.6 (a)(3)(ii)(B)		
5.	Regulated Toxic Air Pollutant Records: The Permittee shall maintain records in accordance with the applicable method used to demonstrate compliance pursuant to Env-A 1406.	Maintain at facility at all times	EU01, EU02, EU03, EU04, EU05, and Facility wide	Env-A 902.01 (c) (new) State Enforceable Only		
6.	<ul> <li>Monitoring Records: The Permittee shall maintain records of monitoring results as specified in Table 6 of this Permit including the following:</li> <li>A) Preventive maintenance and visual inspection records;</li> <li>B) Visible emission/opacity test results;</li> <li>C) NMOC concentration;</li> <li>D) Monthly and 12-month rolling average electrical generation for EU01 and EU02;</li> <li>E) Total monthly landfill gas flow and 12-month rolling average of total landfill gas flow;</li> <li>F) Monthly and 12-month rolling average landfill gas flow for EU01, EU02, and EU03; and</li> <li>G) Actual NOx, SO<sub>2</sub>, CO, PM, and NMOC emissions in tons per month and tons per rolling 12-month period.</li> </ul>	Maintain on a continuous basis	EU01, EU02, EU03, EU04, EU05, and Facility wide	40 CFR 70.6(a)(3)(ii)		
7.	Asbestos-containing waste shipment records: For all asbestos-containing waste material received at the active waste disposal site, the Permittee shall conduct the following:	Whenever asbestos containing wastes are delivered	EU04, EU05	40 CFR 61.154 (e) Waste Shipment Records		

	Table 7 – Applicable Recordkeeping Requirements <sup>1</sup>					
Item #	Recordkeeping Requirement	Frequency of	Applicable	Regulatory Cite		
	1 0 1	Recordkeeping	<b>Emission Unit</b>	•		
	A) Maintain waste shipment records, using a	1 0				
	form similar to that specified in 40 CFR 61					
	Subpart M, and include the following					
	information:					
	1) The name, address, and telephone number					
	of the waste generator.					
	2) The name, address, and telephone number					
	of the transporter(s).					
	3) The quantity of the asbestos-containing					
	waste material in cubic meters (cubic					
	yards).					
	4) The presence of improperly enclosed or					
	uncovered waste, or any asbestos-					
	containing waste material not sealed in leak-tight containers. Report in writing					
	to the local, State, or EPA Regional office					
	responsible for administering the asbestos					
	NESHAP program for the waste					
	generator and if different, for the disposal					
	site, by the following working day, the					
	presences of a significant amount of					
	improperly enclosed or uncovered waste.					
	Submit a copy of the waste shipment					
	record, too.					
	5) The date of the receipt.					
	B) As soon as possible and no longer than 30					
	days after receipt of the waste, send a copy of					
	the signed waste shipment record to the waste					
	generator.					
	C) Upon discovering a discrepancy between the quantity of waste designated on the waste					
	shipment records and the quantity actually					
	received, attempt to reconcile the discrepancy					
	with the waste generator. If the discrepancy					
	is not resolved within 15 days after receiving					
	the waste, immediately report it in writing to					
	the local, State or EPA Regional office					
	responsible for administering the asbestos					
	NESHAP program for the waste generator					
	and if different, for the disposal site.					
	Describe the discrepancy and attempts to					
	reconcile it, and submit the report along with					
	the waste shipment record.					
	D) Retain a copy of all records and reports for at					
0	least 2 years.	TT /1 1 C	ELIOA ELIOA	40 CED (1.154 (6.		
8.	Records of asbestos-containing material	Until closure of	EU04, EU05	40 CFR 61.154 (f) -		
	locations: The Permittee shall conduct the	disposal site		(j)		
	following:  A) Maintain, until closure, records of the					
	location, depth and area, and quantity in cubic					
	rocation, depin and area, and quantity in cubic		<u> </u>			

	Table 7 – Applicable Recordkeeping Requirements <sup>1</sup>				
Item #	Recordkeeping Requirement	Frequency of	Applicable	Regulatory Cite	
		Recordkeeping	<b>Emission Unit</b>		
	meters (cubic yards) of asbestos-containing				
	waste material within the disposal site on a				
	map or diagram of the disposal area.				
	B) Upon closure, comply with all the provisions applicable to inactive waste sites (40 CFR				
	60.151).				
	C) Submit to the Administrator, upon closure of				
	the facility, a copy of records of asbestos				
	waste disposal locations and quantities.				
	D) Furnish upon request and make available				
	during normal business hours, all records				
	required under 40 CFR 61.154				
	E) Notify the Administrator in writing at least 45 days prior to excavating or otherwise				
	disturbing any asbestos-containing waste				
	material that has been deposited at a waste				
	disposal site and is covered. The notice shall				
	include the following:				
	1) Scheduled starting and completion dates.				
	2) The reason for disturbing the wastes.				
	3) Procedures to be used to control				
	emissions during the excavation, storage,				
	transport, and ultimate disposal of the excavated asbestos-containing waste				
	material, and				
	4) Location of any temporary storage site				
	and the final disposal site.				
9.	Other Compliance Demonstration Records: The	As necessary to	EU01, EU02,	Env-A 906 (new)	
	Permittee shall maintain additional records, as	demonstrate	EU03, EU04,		
	necessary, for the purpose of demonstrating	compliance	EU05, and		
	compliance with all state and federal statutes,		Facility wide		
	rules, regulations, and permits.				

# F. Reporting Requirements

The Permittee is subject to the federally enforceable reporting requirements identified in Table 8 below:

	Table 8 – Applicable Reporting Requirements						
Item	Reporting Requirement	Frequency of	Applicable	Regulatory			
#		Reporting	<b>Emission Unit</b>	Cite			
1.	NMOC Emission Rate Report – The Permittee	Annually or Every	EU04, EU05	40 CFR 60.757			
	shall submit an NMOC emission rate report to the	5 Years		(b) and 40 CFR			
	US EPA and DES annually, unless the estimated			60.752 (b)			
	NMOC emission rate is less than 50 megagrams						
	per year in each of the next 5 consecutive years,						
	then the Permittee may elect to submit an estimate						
	of the NMOC emission rate for the next 5-year						
	period in lieu of the annual report. This estimate						

	Table 8 – Applicable Reporting Requirements				
Item #	Reporting Requirement	Frequency of	Applicable	Regulatory	
#	shall include the current amount of solid waste-in-	Reporting	<b>Emission Unit</b>	Cite	
	place and the estimated waste acceptance rate for				
	each year of the 5 years for which an NMOC				
	emission rate is estimated. All data and				
	calculations upon which this estimate is based				
	shall be provided to the US EPA and DES. If the				
	actual waste acceptance rate exceeds the estimated				
	waste acceptance rate in any year reported in the				
	5-year estimate, a revised 5-year estimate shall be				
	submitted to the US EPA and DES. The revised				
	estimate shall cover the 5-year period beginning				
	with the year in which the actual acceptance rate				
	exceeded the estimated waste acceptance rate.				
	The NMOC emission rate report shall include all				
	the data, calculations, sample reports and				
	measurements used to estimate the annual or 5-				
	year emissions.				
2.	<u>Landfill Closure Report</u> – The Permittee shall	Within 30 days of	EU04, EU05	40 CFR 60.757	
	submit a closure report to the US EPA and DES	waste acceptance		(d)	
	within 30 days of waste acceptance cessation.	cessation			
3.	NOx Reporting Requirements: The Permittee	Annually (no later	EU01, EU02,	Env-A 901.09	
	shall submit reports of the NOx records kept	than April 15 <sup>th</sup> of	EU03	(old) and Env-A	
	pursuant to the Section VIII E Table 7.	the following year)		909.03 (new)	
4.	Additional Reporting Requirements: The	As necessary	EU01, EU02,	Env-A 910 (new)	
	Permittee shall submit additional reports, as		EU03, EU04,		
	necessary, for the purposes of demonstrating		EU05 and		
	compliance with all state and federal statutes,		Facility wide		
	rules, regulations, and permits.	A 11 ( 1 4	ELIO1 ELIO2	E 4 007 01	
5.	Regulated Toxic Air Pollutant Reports: The	Annually (no later	EU01, EU02,	Env-A 907.01	
	Permittee shall report actual emissions speciated by individual regulated toxic air pollutants,	than April 15 <sup>th</sup> of	EU03, EU04, EU05 and	(new) State Enforceable	
	including a breakdown of VOC emission	the following year)	Facility wide		
	compounds.		racinty wide	Only	
6.	Semi-Annual Permit Deviation/Monitoring	Semiannually (by	EU01, EU02,	40 CFR	
0.	Reports: The Permittee shall submit a permit	July 31 <sup>st</sup> and	EU03, EU04,	70.6(a)(3)(iii)(A)	
	deviation/monitoring report of the data specified	January 31 <sup>st</sup> of each	EU05 and	, o.o(a)(3)(11)(11)	
	in Table 6 of this Permit every 6 months. All	calendar year)	Facility wide		
	required reports must be certified by a responsible	,	j		
	official consistent with 40 CFR 70.5(d). The				
	report shall contain a summary of the following				
	information:				
	A) Preventive maintenance and visual inspection				
	records;				
	B) Visible emission/opacity test results;				
	C) NMOC concentration;				
	D) Monthly and 12-month rolling average				
	electrical generation for EU01 and EU02;				
	E) Total monthly landfill gas flow and 12-month				
	rolling average of total landfill gas flow;  E) Monthly and 12 month rolling average.				
	F) Monthly and 12-month rolling average				

	Table 8 – Applicable Reporting Requirements					
Item #	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite		
	landfill gas flow for EU01, EU02, and EU03; G) Actual NOx, SO <sub>2</sub> , CO, PM, and NMOC emissions in tons per month and tons per rolling 12-month period; and H) All instances of deviations from Permit					
7.	requirements. <u>Initial Reporting:</u> The Permittee shall provide the following information within 90 days of the	90 days after the effective date of	EU04, EU05	40 CFR 61.153(a)(5), (b),		
	effective date of the National Emission Standard for Asbestos or within 30 days after a change to this information:  A) A brief description of the site; B) The method or methods used to comply with the standard, or alternative procedures to be used; C) Name and address of the owner or operator; D) Location of the source; E) Type of hazardous pollutants emitted and identification of each hazardous air pollutant emission point; F) A brief description of the nature, size, design, and method of operation of the stationary source, including the operating design capacity of the source; G) Average weight per month of the hazardous materials being processed over the 12 months preceding the report; H) Description of the existing control equipment for each emission point, including the following: 1) Each control device for each hazardous pollutant; and 2) Estimated control efficiency (in percent) for each control device; and	National Emission Standard for Asbestos or after a change to the requisite information		and 61.10		
8.	A statement as to whether the source can comply within 90 days of the effective date.  Prompt Reporting of Permit Deviations: The	Within 24 hours of	EU01, EU02,	Env-A 911 (new)		
	Permittee shall promptly report deviations from permit requirements within 24 hours of discovery of such an occurrence by phone, fax or e-mail in accordance with Section XXVIII of this permit and Env-A 911 (new).	discovery of occurrence	EU03, EU04, EU05 and Facility wide	and 40 CFR 70.6 (a)(3)(iii)(B)		
9.	Certification by a Responsible Official: Any report or compliance certification submitted to the DES and/or EPA shall contain certification by a responsible official of truth, accuracy, and completeness as outlined in Section XXI.B of this permit.	As specified	EU01, EU02, EU03, EU04, EU05 and Facility wide	40 CFR 70.5 (d)		
10.	Annual Reporting and Emissions Fees: The Permittee shall submit annual reports of actual	Annually (Reporting by April	EU01, EU02, EU03, EU04,	Env-907.01 (new) and Env-A		

	Table 8 – Applicable Reporting Requirements					
Item	Reporting Requirement	Frequency of	Applicable	Regulatory		
#		Reporting	<b>Emission Unit</b>	Cite		
	emissions of all significant and insignificant	15 <sup>th</sup> and payment	EU05 and	704.03 and		
	activities and payment of emission-based fees in	by October 15 <sup>th</sup> )	Insignificant	704.04		
	accordance with Section XXIII of this permit.		Activities			
11.	Annual Compliance Certification: The Permittee	Annually	EU01, EU02,	40 CFR		
	shall submit an annual compliance certification in	(no later than April	EU03, EU04,	70.6(c)(1)		
	accordance with Section XXI of this permit.	15 <sup>th</sup> of the	EU05 and			
		following year)	Facility wide			

# IX. Requirements Currently Not Applicable

The Permittee did not identify any requirements that are not applicable to the facility.

# **General Title V Operating Permit Conditions**

# X. <u>Issuance of a Title V Operating Permit</u>

**A.** This Permit is issued in accordance with the provisions of Part Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date five (5) years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the Permittee's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

**B.** Pursuant to Env-A 609.02(b), this Permit shall be a state permit to operate as defined in RSA 125-C:11, III.

# XI. <u>Title V Operating Permit Renewal Procedures</u>

Pursuant to Env-A 609.06(b), an application for renewal of this Permit shall be considered timely if it is submitted to the Director at least six months prior to the designated expiration date of this Permit.

## XII. Application Shield

Pursuant to Env-A 609.07, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

## XIII. Permit Shield

- **A.** Pursuant to Env-A 609.08(a), a permit shield shall provide that:
  - 1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  - 2. For any potential applicable requirement or any potential state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically identified in this Title V Operating Permit Section IX as not applicable to the stationary source or area source, the Permittee need not comply with the specifically identified federal or state requirements.
- **B.** The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.08(b). It shall not apply to certain conditions as specified in Env-A 609.08(c) that may be incorporated into this Permit following permit issuance by DES.
- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the NH Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall

not be covered by the permit shield and the Permittee shall comply with the provisions of said requirement to the extent that it applies to the Permittee.

- **D.** If the DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant or Permittee, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- **E.** Pursuant to Env-A 609.08(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.18 or to exercise its summary abatement authority.
- **F.** Pursuant to Env-A 609.08(g), nothing contained in this section or in any title V operating permit issued by the DES shall alter or affect the following:
  - 1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  - 2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15.II:
  - 3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
  - 4. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - 5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
  - 6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to section 114 of the CAA: or
  - 7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

## **XIV.** Reopening for Cause

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.18(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.18(b) through (g).

## **XV.** Administrative Permit Amendments

- **A.** Pursuant to Env-A 612.01, the Permittee may implement the changes addressed in the request for an administrative permit amendment as defined in Part Env-A 100 immediately upon submittal of the request.
- **B.** Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

## XVI. Operational Flexibility

A. Pursuant to Env-A 612.02, the Permittee subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. DES has included permit terms authorizing the generation of DERs.

- 1. The change is not a modification under any provision of Title I of the CAA;
- 2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
- 3. The owner or operator has obtained any temporary permit required by Env-A 600;
- 4. The owner or operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
  - a) The date on which each proposed change will occur or has occurred;
  - b) A description of each such change;
  - c) Any change in emissions that will result;
  - d) A request that the operational flexibility procedures be used; and
  - e) The signature of the responsible official, consistent with Env-A 605.04(b);
- 5. The change does not exceed any emissions limitations established under any of the following:
  - a) The New Hampshire Code of Administrative Rules, Env-A 100-3800;
  - b) The CAA; or
  - c) This Title V Operating Permit; and
- 6. The Permittee, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.
- **B.** For changes involving the trading of emissions, the Permittee must also meet the following conditions:
  - 1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit

independent of otherwise applicable requirements;

- 2. The owner or operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
- 3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
- 4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- **C.** For off-permit changes, the Permittee must also meet the following conditions:
  - 1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  - 2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.03;
  - 3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  - 4. The Permittee keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  - 5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- **D.** For section 502(b)(10) changes, the Permittee must also meet the following conditions:
  - 1. The written notification required above is made at least 7 days prior to the proposed change; and
  - 2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.
- **E.** Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.08.

## **XVII.** Minor Permit Amendments

- **A.** Pursuant to Env-A 612.04 prior to implementing a minor permit modification, the Permittee shall submit a written request to the Director in accordance with the requirements of Env-A 612.04(b).
- **B.** The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.04(c) through (g).
- C. Pursuant to Env-A 612.04(g), the permit shield specified in Env-A 609.08 shall not apply to minor permit amendments under Section XVII. of this Permit.
- **D.** Pursuant to Env-A 612.04(I), the Permittee shall be subject to the provisions of Part Env-A 614 and Part Env-A 615 if the change is made prior to the filing with the Director a request for a minor permit amendment.

# XVIII. Significant Permit Amendments

- **A.** Pursuant to Env-A 612.05, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.05(a)(1) through (7).
- **B.** Prior to implementing the significant permit amendment, the Permittee shall submit a written request to the Director which includes all the information as referenced in Env-A 612.05(b) and (c) and shall be issued an amended Title V Operating Permit from the DES. The Permittee shall be subject to the provisions of Env-A 614 and Env-A 615 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.05(d), (e) and (f).

## XIX. Title V Operating Permit Suspension, Revocation or Nullification

- **A.** Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
  - 1. The Permittee has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  - 2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- **B.** The Director shall nullify any Permit, if following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

# XX. <u>Inspection and Entry</u>

Pursuant to Env-A 614.01, EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the NH Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

# XXI. <u>Certifications</u>

# A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify, for the previous calendar year, that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15th of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

- 1. The terms and conditions of the Permit that are the basis of the certification;
- 2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
- 3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4. Any additional information required by the DES to determine the compliance status of the source.

#### **B.** Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification of accuracy statement by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
6 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

Office of Environmental Stewardship
Director Air Compliance Program
United States Environmental Protection Agency
1 Congress Street
Suite 1100 (SEA)
Boston, MA 02114-2023
ATTN: Air Compliance Clerk

# XXII. <u>Enforcement</u>

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii) a Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

# **XXIII.** Emission-Based Fee Requirements

- **A.** The Permittee shall pay an emission-based fee annually for this facility as calculated each calendar year pursuant to Env-A 704.03.
- **B.** The Permittee shall determine the total actual annual emissions from the facility to be included in the emission-based multiplier specified in Env-A 704.03(a) for each calendar year in accordance with the methods specified in Env-A 620.
- **C.** The Permittee shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 704.03 and the following equation:

#### FEE = E \* DPT \* CPIm \* ISF

Where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 704.

E = The emission-based multiplier is based on the calculation of total annual

emissions as specified in Env-A 704.02 and the provisions specified in Env-A

704.03(a).

DPT = The dollar per ton fee the DES has specified in Env-A 704.03(b).

CPIm= The Consumer Price Index Multiplier as calculated in Env-A 704.03(c). ISF = The Inventory Stabilization Factor as specified in Env-A 704.03(d).

- **D.** The Permittee shall contact the DES each calendar year for the value of the Inventory Stabilization Factor
- **E.** The Permittee shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.
- **F.** The Permittee shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XXIII.B. and C of this Permit for each calendar year by October 15<sup>th</sup> of the following calendar year in accordance with Env-A 704.04. The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
6 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN.: Emissions Inventory

**G.** The DES shall notify the Permittee of any under payments or over payments of the annual emission-based fee in accordance with Env-A 704.05.

## **XXIV.** Duty To Provide Information

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the DES copies of records that the Permittee is required to retain by this Permit. The Permittee may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Part Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Part Env-A 103.

## XXV. Property Rights

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

# XXVI. Severability Clause

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

# **XXVII.** Emergency Conditions

Pursuant to 40 CFR 70.6 (g), the Permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>2</sup> emission limitations specified in this Permit as a result of an emergency<sup>3</sup>. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- **A.** An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- **B.** The permitted facility was at the time being properly operated;
- **C.** During the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- **D.** The Permittee submitted notice of the emergency to the DES within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

# XXVIII. Permit Deviation

In accordance with 40 CFR 70.6(a)(3)(iii)(B), the Permittee shall report to the DES all instances of deviations from Permit requirements, by telephone, fax, or e-mail (pdeviations@des.state.nh.us) within 24 hours of discovery of such deviation. This report shall include the deviation itself,

<sup>&</sup>lt;sup>2</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

<sup>&</sup>lt;sup>3</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

including those attributable to upset conditions as defined in this Permit, the probable cause of such deviations, and any corrective actions or preventative measures taken.

Within 15 days of discovery of the permit deviation, the Permittee shall submit a written report including the above information as well as the following: preventive measures taken to prevent future occurrences; date and time the permitted device returned to normal operation; specific device, process or air pollution control equipment that contributed to the permit deviation; type and quantity of excess emissions emitted to the atmosphere due to permit deviation; and an explanation of the calculation or estimation used to quantify excess emissions.

Said Permit deviation shall also be submitted in writing to the DES in the semi-annual summary report of monitoring and testing requirements due July 31st and January 31st of each calendar year. Deviations are instances where any Permit condition is violated and has not already been reported as an emergency pursuant to Section XXVII of this Permit.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

Four Hills TV final 3-3-03 October 21, 2004 version